◆**FLIR**®

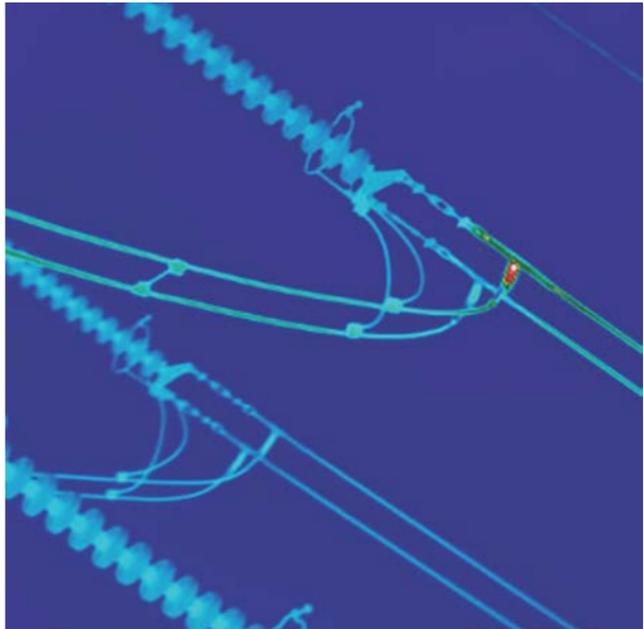# Getting Started Guide FLIR T6xx series

Flir T-Series Infrared Cameras

Flir T420   Flir T420bx   Flir T440   Flir T440bx

Flir T620   Flir T620bx   Flir T640   Flir T640bx

EN-US English

Quick start guide

Follow this procedure to get started right away:

1. *Put a battery into the battery compartment.*
2. *Charge the battery for 4 hours before starting the camera for the first time, or until the green battery condition LED glows continuously.*
3. *Insert a memory card into the card slot.*
4. *Push the ① button to turn on the camera.*
5. *Aim the camera toward the object of interest.*
6. *Autofocus the camera by pushing the Autofocus/Save button halfway down.*
7. *Push the Autofocus/Save button fully down to save an image directly.*
8. *Move the image to a computer by doing one of the following:*

   • *Remove the memory card and insert it into a card reader connected to a computer.*
   • *Connect a computer to the camera using a USB mini-B cable.*

9. *Move the image from the card or camera, using a drag-and-drop operation.*

Note: *You can also move the images to the computer using the FLIR Tools software, which comes with your camera.*
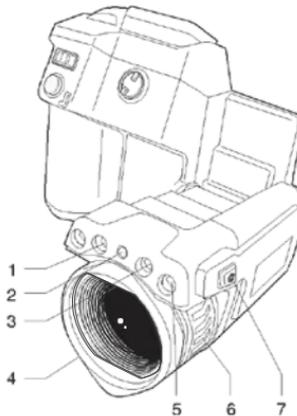
Camera parts

View from the right
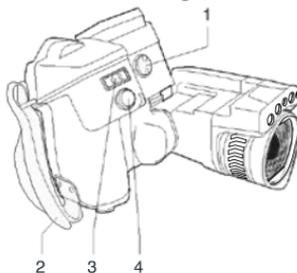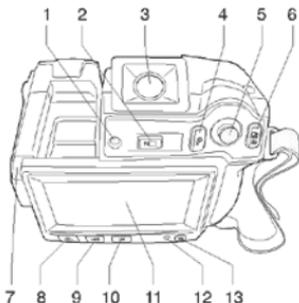
1. *Knob to change the dioptric correction for the viewfinder*
2. *Handstrap*
3. *Digital zoom button*
4. *Autofocus/Save button*

View from the left

1. *Lamp for the digital camera*
2. *Laser pointer*
3. *Lamp for the digital camera*
4. *Infrared lens*
5. *Digital camera*
6. *Focus ring*
7. *Button to operate the laser pointer*


View from the rear

1. *Sensor to adjust the touch-screen LCD intensity automatically*
2. *Button to switch between touch-screen LCD mode and viewfinder mode.* **Note:** *Dependent on camera model.*
3. *Viewfinder (dependent on the camera model)*
4. *Programmable button*
5. *Joystick*
6. *Button with two functions:*
   - *Display the menu system*
   - *Back button*
7. *Stylus pen*
8. *Button to switch between different image modes:*
   - *Infrared camera*
   - *Digital camera*
   - *Thermal fusion*
   - *Picture-in-picture*
9. *Button to switch between automatic mode, manual mode, manual minimum mode, and manual maximum mode*
10. *Image archive button*
11. *Touch-screen LCD*
12. *Power indicator*
13. *On/off button*

Connecting external devices and storage media
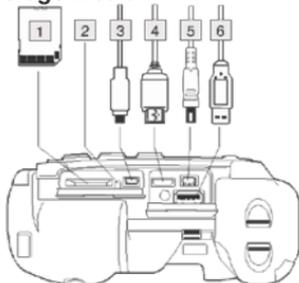
1. *Memory card*
2. *Indicator showing that the memory card is busy.* **Note**: *Do not remove the memory card when this indicator glows*
3. *USB mini-B cable (to connect the camera to a PC)*
4. *HDMI cable*
5. *Power cable*
6. *USB-A cable*

Screen elements
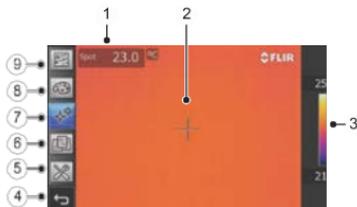
Note: *The availability of features and functions is dependent on the camera series model and/or the customer configuration.*

1. *Measurement result table*
2. *Measurement tools (e.g., spotmeter)*
3. *Temperature scale*
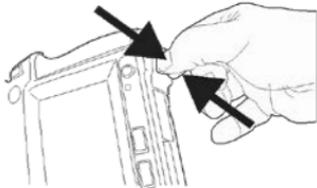4. *Back button.*
5. *Setup mode (camera, video, program, settings)*

6. *Predefined sets of measurement tools.*
7. *Measurement tools*
8. *Color palettes*
9. *Measurement parameters*

Removing the battery

1. *Push the two release buttons on the battery cover together.*

2. *Carefully pull out the battery.*

Removing a lens

1. *Rotate the outermost ring 30° clockwise (looking at the camera from the rear).*
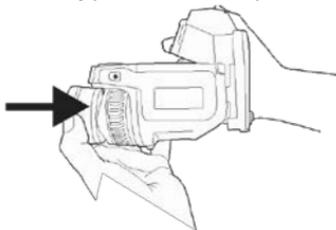
2. *Carefully pull out the lens.*

Mounting a lens

1. *Note the index marks on the lens and on the lens bayonet mount.*

2. *Carefully push the lens into position.*

3. *Rotate the lens 30° counter-clockwise (looking at the camera from the rear).*

To keep in mind

- *Adjust the focus first. When the camera is out of focus, the measurement is wrong.*
- *By default, most cameras adapt the scale automatically. Use this mode first, but do not hesitate to set the scale manually.*
- *A thermal camera has a resolution limit. This depends on the size of the detector, the lens, and the distance to the target. Use the center of the spot tool as a guide to the minimum possible object size, and get closer if necessary. Make sure to stay away from dangerous areas or live electrical components.*
- *Be careful when holding the camera perpendicular to the target—you can become a source of infrared radiation through reflection.*
- *Select a zone of high emissivity, i.e., an area with a matte surface, to perform a measurement.*
- *Blank objects, i.e. with low emissivities, may appear warm or cold in the camera, as they can cause reflections.*
- *Avoid direct sunlight on the details that you are inspecting.*

- *Various types of faults, such as those in a building's construction, may result in the same type of thermal pattern.*
- *Correctly analyzing an infrared image requires professional knowledge about the application.*

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